AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q86778

Application No.: 10/528,376

REMARKS

Review and reconsideration on the merits are requested.

Claims 1-6 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 2002-

023356 (JP '356). The Examiner cited JP '356 as disclosing an anisotropic material meeting

each of the terms of the rejected claims, including a functional compound 17 (electroless plating

film) formed on a surface of an alternating-line pattern (including a first self-organization film

11b comprising a fluoro alkyl silane (unexposed portion) and a second self-organization film 15

having a second functional group such as an amino group. The electroless plating film 17 is

selectively formed on field 15 using the difference among the respective functional groups as

shown in Fig. 5.

Claims 1-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '356 in

view of EP 1,041,652 (EP '652). The Examiner relied on EP '652 as disclosing that use of

organic semiconductor materials as a functional material for fabricating circuitry, which

semiconductor material may be bound to fluorinated silane surfaces, citing paragraphs [0030]

and [0031].

In response, claim 1 has been amended to exclude the prior art. Specifically:

(i) Silicone recited in claim 1 has been deleted.

(ii) The fluorine-containing compound has been limited to the fluorine-containing

compounds (a)-(f) described at page 15, line 25 to page 16, line 13 of the specification.

(iii) The fluoroalkyl group in the fluorine-containing compound has been limited to a

perfluoroalkyl group as described at page 16, lines 14-15 of the specification.

(iv) The fluorine-containing compounds (a)-(d) have been limited to a fluorine-containing

organic silane compound, a fluorine-containing organic thiol compound, a fluorine-containing

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organic disulfide compound, and a fluorine-containing organic phosphate ester compound as described at page 16, lines 16-20 of the specification.

(v) The functional group in the fluorine-containing compound (d) has been limited to a silane group, a thiol group, a disulfide group or a phosphoric acid group.

(vi) The fluorine-containing compounds (e) have been limited to the general formula described at page 24, line 9 of the specification.

(vii) The fluorine-containing compounds (f) have been limited to the general formula described at page 26, line 8 of the specification.

None of JP '356 and EP '652 discloses or suggests the anisotropic material of amended claim 1. For example, the fluorine-containing compound (a) defined in amended claim 1 satisfies both of (i) a fluorine compound which has a branched perfluoroalkyl group having 5 or less carbon atoms, and (ii) a fluorine-containing organic silane compound, fluorine-containing organic thiol compound, fluorine-containing organic disulfide compound, and/or fluorinecontaining organic phosphate ester compound. EP '652, at paragraphs [0021] and [0030] (working example), describes a perfluoroalkyl group having 8 carbon atoms [that is, C₈F₁₇C₂H₄Si(OEt)₃], which is outside the scope of the fluorine-containing compound (a) having a branched perfluoroalkyl group having 5 or less carbon atoms defined in amended claim 1. JP '356, at paragraph [0017] describes examples of a fluoroalkylsilane. JP '356, at paragraph heptadecafluorotetrahydrodecyl triethoxysilane. exemplifies [0017] heptadecafluorotetrahydrodecyl trichlorosilane, tridecafluorotetrahydrooctyl trichlorosilane, and trifluoropropyl triethoxysilane, which are outside the scope of the fluorine-containing compound (a) having a branched fluoroalkyl group having 5 or less carbon atoms as defined in amended claim 1. Although the trifluoropropyl group disclosed in paragraph [0017] of JP '356 is a

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fluoroalkyl group, the trifluoropropyl group is $\underline{\text{not}}$ a perfluoroalkyl group as required by amended

claim 1.

There is nothing in the cited references which would lead one of ordinary skill to modify

the structure of the fluorine-containing compound employed therein so as to be within the scope

of amended claim 1.

Moreover, none of the references discloses or suggests that the fluorine-containing

compound (a) having a branched fluoroalkyl group having 5 or less carbon atoms defined in the

amended claim 1 can give the advantageous effect, for example, that enables the production of

an anisotropic material having an alternating-line pattern structure by a simple process of

applying an organic solvent liquid.

Furthermore, because JP '356 and EP '652 do not disclose the fluorine-containing

compound as defined in amended claim 1, there is no combination of the cited prior art which

could achieve the present invention.

For the above reasons, it is respectfully submitted that claims 1-6 are not anticipated by

JP '356 and are patentable over the combination of JP '356 and EP '652. Withdrawal of the

foregoing rejections is respectfully requested.

Withdrawn claim 7 directed to a method for producing an anisotropic material has been

amended to include all of the limitations of amended product claim 1. If claim 1 is found to be

allowable. Applicants respectfully request rejoinder of withdrawn method claims 7-9 pursuant to

MPEP § 821.04. Claim 10 has been canceled as not further limiting the subject matter of

amended claim 7.

Withdrawal of all rejections and allowance of claims 1-9 is earnestly solicited.

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In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington,

D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: July 29, 2008